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Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/668,395
Filing Date: September 23, 2003
Appellant(s): KIRKLEY, ADAM J.

Peter H. Priest
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1/18/2011 appealing from the Office action mailed 7/14/2010.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 1 – 15 are subjected to the current appeal.

Claims 1, 2 and 4-14 now stand rejected under 35 U.S.C. § 103(a) as unpatentable over Swartz U.S. Patent No. 5,877,485 (Swartz) in view of Walter et al. U.S. Patent No. 5,992,570 (Walter). Claim 3 now stands rejected under 35 U.S.C. § 103(a) based on Swartz in view of Walter in further view of Zhang et al. U.S. Published Patent Application No. 2003/0177066 (Zhang). Claim 15 now stands rejected under 35 U.S.C. 103(a) based on Swartz in view of Walter in further view of Walter et al. U. S. Patent No. 5,744,784 (Walter B).

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

5877485	Swartz	3-1999
5992570	Walter	11-1999
20030177066	Zhang	9-2003
5747784	Walter	5-1998

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 1 - 2, and 4 - 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz (US 5877485) in view of Walter et al. (Hereinafter Walter) (US 5992570).

As per Claim 1, Swartz discloses a security method for a self-service checkout system (Abstract) comprising the steps of:

a) obtaining identification information of a customer involved in a self-service transaction by a self-service computer of a customer operated self-service checkout system (Column 4 line 27 – 42 teaches the system receive customer information in a transaction from a customer loyalty card);

b) determining a risk level associated with the identification information of the customer (Abstract teaches the self-scanning checkout system determines the risk level/ number of items to check based on the identification information of the customer such as shopping frequency, queue length, prior history, and etc.);

c) determining a security level associated with the risk level (Abstract and Column 6 lines 45 – column 7 line 34 teaches the self-scanning checkout system calculates how many items to be check is determined based on security criteria and customer identification information such as shopping frequency, prior history and etc.); and

d) configuring the self-service checkout system to complete the self-service transaction by the self-service computer including the self-service computer to identify products, in accordance with the security level by the self-service computer (Abstract teaches the self checkout system that determines how many items to check by cashier or security guard based on the security level).

However, Swartz is silent regarding the self-checkout system accepting payment from the customer at the self-service computer.

Walter discloses self-service checkout apparatus having the self-checkout system accepting payment from the customer at the self-service computer (Abstract teaches self-service checkout apparatus accepting card and cash payment).

Therefore, from this teaching of Walter, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify self-checkout system which determines the risk and security level of customer using statistic data of

Swartz to include the self-checkout system accepting payment as taught by Walter to provide the checkout station which has combined functionality of ATM and POS terminals (Column 2 line 11 - 14).

Furthermore, all the claimed elements were known in the prior arts of Swartz and Walter, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

As per Claim 2, Swartz discloses obtaining the identification information from a loyalty card carried by the customer (Column 4 line 27 – 42).

As per Claim 4, Swartz discloses

b-1) storing shopping history data of the customer (Abstract); and

b-2) assigning a risk level based upon the shopping history data of the customer (Abstract).

As per Claim 5, Swartz discloses

b-1) storing shopping history data of the customer (Column 7 lines 3 – 8);

b-2) obtaining current transaction data of the customer (Column 6 lines 45 – 54); and

b-2) assigning a risk level based upon the shopping history data of the customer and the current transaction data of the customer (Column 7 line 35 – 55).

As per Claim 6, Swartz discloses

b-1) defining categories of shoppers of different risk levels (Abstract);

b-2) storing shopping history data of the customer (Abstract);

b-3) determining a category of the customer by comparing the shopping history data of the customer to the categories of shoppers (Column 7 line 35 – 55); and

b-4) determining that the risk level is associated with the category of the customer (Column 7 line 35 – column 8 line 15).

As per Claim 7, Swartz discloses

c-1) looking up the risk level of the customer in an established list of risk levels (Column 7 line 35 – column 8 line 15); and

c-2) determining that the security level of the customer is associated with the risk level of the customer in the list (Column 8 line 16 – 49).

As per Claim 8, Swartz discloses relaxing security for lower security levels (Abstract and column 7 line 35 – column 8 line 24. Fewer items will be checked for a customer who is high security level and low risk level).

As per Claim 9, Swartz discloses tightening security for higher security levels (Abstract and column 7 line 35 – column 8 line 24. More items will be checked for a customer with higher risk level and lower security level).

As per Claim 10, Swartz discloses

e) implementing configured security procedures for the security level until the customer leaves the self-service checkout system (Column 8 line 16 – 49); and

f) storing data from the transaction in shopper history data of the customer (Column 8 line 36 – 49).

Claims 11 – 15 have similar limitations as Claims 1 – 2 and 4 - 10. Therefore, Claims 11 – 15 are rejected under same rationale.

1. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz in view of Walter and in further view of Zhang et al. (hereinafter Zhang) (US 20030177066).

As per Claim 3, the combination of Swartz and Walter discloses all the elements of the claimed invention, but is silent regarding obtaining biometric data from the customer; and determining that the identification information of the customer is associated with the biometric data of the customer.

Zhang discloses an integrated marketing promotion system and method having obtaining biometric data from the customer (Paragraph 127); and determining that the

identification information of the customer is associated with the biometric data of the customer (Paragraph 127).

Therefore, from this teaching of Zhang, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify self-scanning checkout system of the combination of Swartz and Walter to include biometric data of customer as a identification information as taught by Zhang to easily identify and verify the customer.

Furthermore, all the claimed elements were known in the prior arts of Swartz, Walter and Zhang, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Swartz (US 5877485) in view of Walter et al. (Hereinafter Walter) (US 5992570) in further view of Walter et al. (Hereinafter WalterB) (US 5747784).

As per Claim 15, Swartz discloses a security method for a self-service checkout system (Abstract) comprising the steps of:

a) obtaining identification information of a customer involved in a self-service transaction by a self-service computer of a customer operated self-service checkout

system (Column 4 line 27 – 42 teaches the system receive customer information in a transaction from a customer loyalty card);

b) determining a risk level associated with the identification information of the customer (Abstract teaches the self-scanning checkout system determines the risk level/ number of items to check based on the identification information of the customer such as shopping frequency, queue length, prior history, and etc.);

c) determining a security level associated with the risk level (Abstract and Column 6 lines 45 – column 7 line 34 teaches the self-scanning checkout system calculates how many items to be check is determined based on security criteria and customer identification information such as shopping frequency, prior history and etc.); and

d) configuring the self-service checkout system to complete the self-service transaction by the self-service computer including the self-service computer to identify products, in accordance with the security level by the self-service computer (Abstract teaches the self checkout system that determines how many items to check by cashier or security guard based on the security level).

However, Swartz is silent regarding the self-checkout system accepting payment from the customer at the self-service computer.

Walter discloses self-service checkout apparatus having the self-checkout system accepting payment from the customer at the self-service computer (Abstract teaches self-service checkout apparatus accepting card and cash payment).

Therefore, from this teaching of Walter, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify self-checkout system which determines the risk and security level of customer using statistic data of Swartz to include the self-checkout system accepting payment as taught by Walter to provide the checkout station which has combined functionality of ATM and POS terminals (Column 2 line 11 - 14).

Furthermore, all the claimed elements were known in the prior arts of Swartz and Walter, and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Swartz and Walter teaches all the elements of the claimed invention but is silent regarding performing weight checks of products placed on the scale by the customer at the self-service computer.

WalterB discloses method and apparatus for enhancing security in a self-service checkout system having the weight scale for perform weight check on the self-service computer (Column 3 line 66 – Column 4 line 4).

Therefore, from this teaching of WalterB, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify self-checkout system which determines the risk and security level of customer using statistic data which accept payment from customer of Swartz and Walter to include weight scale as

taught by WalterB to determine the insertion of items (Column 3 line 66 – Column 4 line 4).

(10) Response to Argument

On page 12 of appeal, the Appellant argues, "With respect to claim 1, the reliance upon Swartz is misplaced. Swartz completely lacks the step of 'configuring the self-service checkout system...' as claimed. Rather than 'configuring the self-service checkout system", Swartz has a human being apply a different level of security by checking a different number of products. Claim 1 is not obvious therefrom.'" The Examiner respectfully disagrees. The summary of the invention section (column 2 line 1 – 54) clearly teaches configuring the self checkout system. The system which communicate with a host computer, which determines risk level of customer. Therefore, the self checkout system is the one which determines the risk level of the customer, not a human.

On Page 12 of the Appeal, the Appellant argues, "Regarding claim 2, while the relied upon text of Swartz at col. 4, lines 27-42 addresses scanning a 'loyalty card', it does so in the context of dispensing a scanning terminal 100 from the dispenser 2 to a shopper. As a result, this portion of Swartz does not meet the remainder of the claim in which the obtained identification information is used in 'determining a risk level associated with the identification information of the customer.' At Swartz col. 4, lines 43-46 Swartz indicates that it is determined if the customer is 'allowed to access a terminal 100 (i.e., the shopper is a member of the self-service system)'. In response to

applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., determining a risk level associated with the identification information of the customer) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On Page 13 of the Appeal, the Appellant argues, "Claim 5 addresses 'obtaining current transaction data of the customer' and assigning risk in part based thereon. The Official Action relies on Swartz col. 6, lines 45-54 and col. 7, lines 35-55. Neither portion of Swartz meets the claim." The Examiner respectfully disagrees. Column 6 line 45 – 54 does teaches obtaining current transaction data of the customer such as the scanning item to be purchased for the customer. Column 7 line 35 – 55 teaches determining risk levels of the customer by how many items need to be checked by security person. The more items to be checked mean the customer is riskier. Therefore, Swartz col. 6, lines 45 - 54 and col. 7, lines 35 - 55 teaches corresponding claim elements.

On Page 13 of the Appeal, the Appellant argues, "With respect to claim 6, again the cited portions of Swartz do not meet the language of this claim." The Examiner respectfully disagrees. The cited portion of the Swartz does read on claim languages. For example, claim language b – 3) determining a category of the customer by

comparing the shopping history data of the customer to the categories of shoppers is covered by Column 7 line 35 – 55. Column 7 line 35 – 55 teaches determining risk levels of the customer by how many items need to be checked by security person. The more items to be checked mean the customer is riskier. Therefore, cited portion of Swartz does meet the language of claim 6.

On Page 13 of the Appeal, the Appellant argues, "With respect to claim 7, Swartz does not appear to establish categories of risk levels apparently analyzing situations on a case by case basis. The remaining claims are similarly not met by Swartz." The Examiner respectfully disagrees. Swartz discloses what factors are considered to determine the risk level of the customer and how many items to be checked are determined by using the those entered factors from the self-checkout system (Column 6 line 55 – Column 7 line 34 and Column 7 line 44 – Column 8 line 15). Therefore, it is not case by case. Furthermore, in response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., establish categories of risk levels) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

On Page 14 of the Appeal, the Appellant argues, "This rejection is not supported by the relied upon art. 35 U.S.C. § 103 which governs obviousness indicates that "differences between the subject matter sought to be patented and the prior art" are to be assessed based upon "the subject matter as a whole". Analyzing the entirety of each claim, the rejections under 35 U.S.C. § 103 are not supported by the relied upon art as addressed further below. Only after an analysis of the individual references has been made can it then be considered whether it is appropriate to combine teachings. However, as addressed further below, an objective analysis considers failure of others, the lack of recognition of the problem, and must avoid the improper hindsight reconstruction of the present invention." In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

On Page 15 of the Appeal, the Appellant argues, " While Walter B addressed the use of weight scale 20 for optionally weighing 'the contents of the one or more grocery bags 16 which may be placed on the weight scale 20 during a checkout procedure' and that the 'weight scale 20 may be used for monitoring the insertion of items into and

removal of items from the grocery bags 16 as described further below', it provides no basis for modifying Walter and Swartz in the manner suggested by the Official Action. Reliance upon Walter B appears misplaced as if anything it might correctly be viewed as teaching away from the present invention." The Examiner respectfully disagrees. In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, all three arts (Swartz, Walter, WalterB) teach self-service checkout system. Furthermore, the claim language only mentions about weight checks of products placed on the scale by the customer at the self-service computer and WalterB does exactly teaches what the claim language says. The Examiner further notes that ,considering the reference as a whole, column 8 line 47 – 55 of WalterB teaches how weight scale is used to enhance security during checkout routine by performing the weight check. Therefore, the Examiner contends that WalterB does not teach away from the present invention and the combination of Swartz, Walter and WalterB is valid.

On Page 15 of the Appeal, the Appellant argues, "as shown above, the invention claimed is not taught and not suggested by the relied upon prior art. The references cited by the Examiner, if anything, teach away from the present invention. It is only in hindsight, after seeing the claimed invention, that the Examiner could combine the references as the Examiner has done." In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Ig T An/

Examiner, Art Unit 3687

/Matthew S Gart/

Supervisory Patent Examiner, Art Unit 3687

Conferees:

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